| Notice of Allowability | Application No. | Applicant(s) |
|--|--|-----------------------------|
| | 09/778,881 | WONG, TIN CHEUNG |
| | Examiner | Art Unit |
| | Isaac M. Woo | 2166 |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. | | |
| 1. This communication is responsive to <u>response filed on 03/25/2005</u> . | | |
| 2. The allowed claim(s) is/are <u>8, 10-13 and 15-17 (Renumbered 1-8)</u> . | | |
| 3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. | | |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached | | |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date | | |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date | | |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). | | |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | |
| Attach was setted | | |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892) | 5. ☐ Notice of Informal Pa | atent Application (PTO-152) |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. Interview Summary | · |
| 3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 | Paper No./Mail Dat 8), 7. ⊠ Examiner's Amendn | |
| Paper No./Mail Date 4. | 8. ⊠ Examiner's Stateme | nt of Reasons for Allowance |
| MOHAMMAD ALI PRIMARY EXAMINER | | |

Application/Control Number: 09/778,881 Page 2

Art Unit: 2166

DETAILED ACTION

1. This office action is in response to the Appeal Brief field on March 25, 2005.

2. In view of the Appeal Brief filed on March 25, 2005 and response to conference

decision, PROSECUTION is hereby reopened.

3. Claims 1-7 are canceled. Claims 8-17 are presented for examination.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher W. Brody (Reg. No. 33,613) on 01/04/2006.

The application has been amended as follows:

Cancel claims 9 and 14.

Rewrite claim 8, as follows:

8. A computer automated process for identification, management and

retrieval of engineering drawings in digital format comprising the steps of:

(i) analyzing graphical and textual digital data in a drawing using a central

Art Unit: 2166

processing unit to identify individual engineering drawings, to identify a series of discrete boxes within each engineering drawing containing predefined keywords and to further identify any text contained within the drawing and within said discrete boxes; and

(ii) storing a textual content in the discrete boxes in a memory means in a relational database, the textual content of the discrete boxes is stored by reference to the predefined keywords of each discrete box and wherein the individual engineering drawings are identified and retrieved by reference to the predefined keywords and the textual contents of the discrete boxes and the text contained within the individual engineering drawing;

wherein all the graphical digital data is analyzed by the central processing unit to identify any horizontal two point straight line array or multiple line array longer than a predetermined figure;

wherein the central processing unit then identifies all lines connecting two points of the horizontal two point straight line to establish a closed rectangular region; and

wherein any closed rectangular region not bounded by a larger closed rectangular region is identified as the boundary of each individual engineering drawing.

In claim 10, line 1, delete [in claim 9,] and insert - - "in claim 8," - -.

In claim 11, line 4, delete [can be] and insert - - "is" - -.

In claim 12, line 2, delete [may be] and insert - - "is" - -.

In claim 13, line 2, delete [may be] and insert - - "are" - -, and lines 4-5, delete [may be readily identified by suitable means such as highlighting] and insert - - "is readily

Art Unit: 2166

identified by suitable highlighting means" - -.

In claim 15, line 2, delete [may be] and insert - - "are" - -, and lines 4-5, delete [by suitable means such as highlighting] and insert - - "by suitable highlighting means" - -.

In claim 16, line 2, delete [may be] and insert - - "are" - -, and lines 4-5, delete [by suitable means such as highlighting] and insert - - "by suitable highlighting means" - -.

In claim 17, line 2, delete [may be] and insert - - "are" - -, and lines 4-5, delete [by suitable means such as highlighting] and insert - - "by suitable highlighting means" - -.

Allowable Subject Matter

3. Claims 8, 10-13 and 15-17 are allowed.

Reason For Indicating Allowable Subject Matter

5. The following is a statement of reasons for the indication of allowable subject matter: Claim 8 identifies distinct features, the computer automated process for identification, management and retrieval of engineering drawings in digital format. The closest prior art, Williard et al (U.S. Patent No. 5,895,473) discloses, analyzing graphical and textual digital data in a drawing using a central processing unit to identify individual engineering drawings, to identify a series of discrete boxes within each engineering drawing containing predefined keywords and to further identify any text contained within the individual engineering drawing and within the discrete boxes, storing a textual content in the discrete boxes in a memory means in a relational database, the textual

Art Unit: 2166

content of the discrete boxes is stored by reference to the predefined keywords of each discrete box and wherein the individual engineering drawings are identified and retrieved by reference to the predefined keywords and the textual contents of the discrete boxes and or the text contained within individual engineering drawing. Williard et al (U.S. Patent No. 5,895,473) does not address the computer automated process for identification, management and retrieval of engineering drawings in digital format for all the graphical digital data is analyzed by the central processing unit to identify any horizontal two point straight line array or multiple line array longer than a predetermined figure, the central processing unit then identifies all lines connecting two points of the horizontal two point straight line to establish a closed rectangular region, and any closed rectangular region not bounded by a larger closed rectangular region is identified as the boundary of each individual engineering drawing. Williard et al fails to suggest the claimed limitation as mentioned above in combination with other limitations of the dependent and independent claims. The claims 8, 10-13 and 15-17 are hereby allowed.

Application/Control Number: 09/778,881

Art Unit: 2166

Conclusion

Page 6

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M. Woo whose telephone number is (571) 272-

4043. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 9, 2006

MOHAMMAD ALI PRIMARY EXAMINER